

REMARKS

Claims 26-40 are pending in this application. Claims 26, 30-35, 39 and 40 are rejected and Claims 27-29, 36-38 are objected to. Claims 28-29 were, at the time of the above referenced Official Action, already written in independent form and therefore should have been designated as “allowable” rather than designated as “objected to” in the Official Action. Claims 26-31 and 34-35 have been amended. Of those, Claims 28 and 29 have been amended only to improve readability. From that premise, the present amendment and remarks are submitted for consideration. Reconsideration and allowance of the above-referenced application is respectfully requested.

The amendments to the claims are fully supported by the specification and claims as originally filed. In particular, attention is directed to Page 13, lines 14-21, Page 14 line 11 through Page 15, line 2 and Page 19, lines 6-17. No new matter has been added.

Rejections Under 35 U.S.C. § 101

Claims 34-35 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. As suggested by the Examiner, Claims 34-35 have been amended to be directed to cells which are isolated. Accordingly, the rejection is rendered moot and withdrawal of the rejection is respectfully requested.

Rejections Under 35 U.S.C. § 112

Claims 26, 30-35, 39-40 are rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling. The Examiner points out that the claims do not set forth a functional limitation for the nucleic acids encoding the variant polypeptides by which one of ordinary skill in the art could readily identify the claimed nucleic acid without undue experimentation.

Claims 26, 30-35, 39-40 are rejected under 35 U.S.C. § 112, first paragraph, as failing to meet the written description requirement. The Examiner points out that a correlation between

function and structure for the claimed invention is one acceptable approach to meet the written description requirement.

Responsive to the above rejections of Claims 26, 30-35, 39-40 under 35 U.S.C. § 112, first paragraph, Applicants have amended the claims to more clearly define the invention to require that the claimed nucleotide sequence having at least about 90% sequence identity has tyrosine kinase activity. Thus, the invention as now claimed requires 90% homology to a nucleotide sequence encoding an HPTK6 polypeptide comprising the amino acid sequence shown in SEQ ID NO:4 and that particular sequence must have tyrosine kinase activity. By this amendment, Applicants have provided a clear means by which one of ordinary skill in the art would be enabled to produce and identify the present invention without undue experimentation and further provides a clearly understood description of the claimed invention. By this amendment, the above recited rejections of Claims 26, 30-35, 39-40 under 35 U.S.C. § 112, first paragraph are overcome. Withdrawal of the above rejections is respectfully requested.

Claims 34-35 are rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling. Specifically, the Examiner contends that the specification is not enabling for *in vivo* transfection. As suggested by the Examiner, the invention as now defined by Claims 34 and 35 is limited to isolated cells. By this amendment, the rejection is overcome. Withdrawal of the rejection is respectfully requested.

Claims 30-31 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. As suggested by the Examiner, the invention as now defined by Claims 30-31 clearly requires that the stringent hybridization conditions include employing a denaturing agent during hybridization and low ionic strength and high temperature for washing. By this amendment, the rejection is overcome. Withdrawal of the rejection is respectfully requested.

CONCLUSION

Claims 27-29 are resubmitted for consideration in independent form. Applicants respectfully assert that previously objected-to Claims 27-29 and 36-38 are now allowable.

Rejected Claims 26, 30-35 and 39-40 have been amended in accordance with the Examiner's suggestions. In light of the above, Applicants believe that this application is now in condition for allowance and therefore requests favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'S. Kelber', is written over a horizontal line.

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